



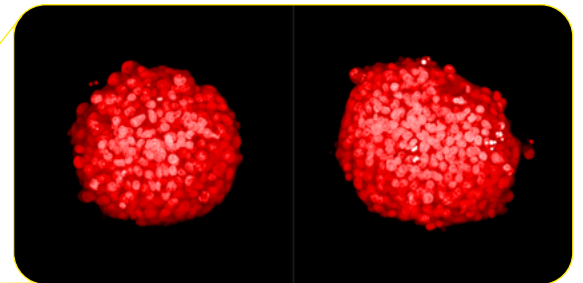
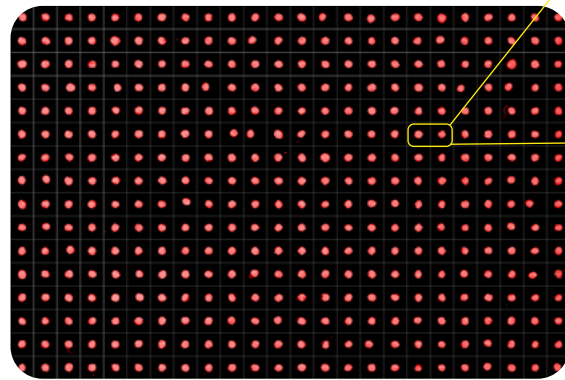
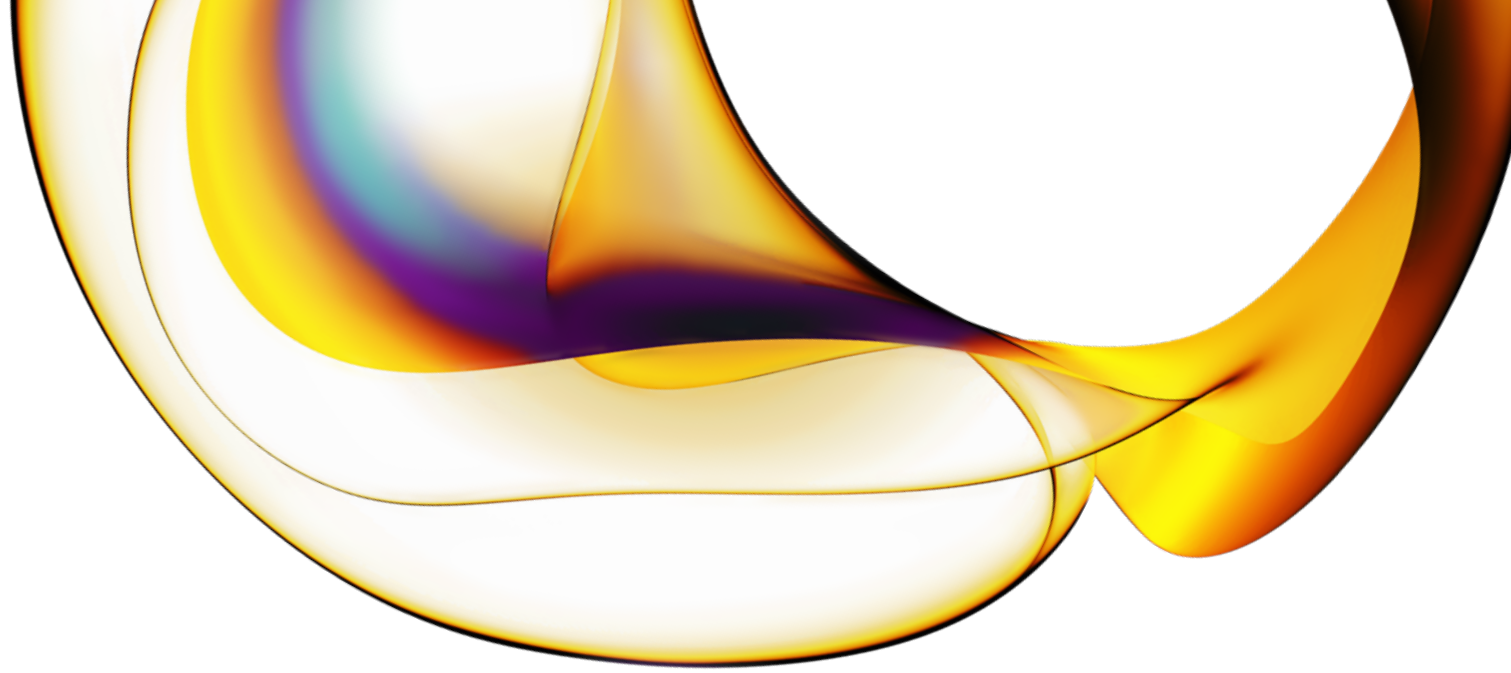
High-resolution 3D imaging without the transfer.

From formation to discovery in one plate

Three-dimensional (3D) cell models are increasingly used in translational research to support physiologically relevant, imaging-based investigations. Yet researchers need more than ultra-low attachment (ULA) surfaces; they need imaging reliability and seamless workflow integration.

Traditional ULA round-bottom plates excel at generating 3D spheroids and organoids but present significant imaging challenges. Their curved geometry and thick plastic construction are not well-suited for high-quality 3D imaging using water immersion objectives. As a result, researchers must transfer spheroids to flat-bottom imaging plates for high-resolution analysis, a step that is often manual, time-consuming, and may risk spheroid loss or damage.

The **PhenoPlate™ 3D 384-well microplate, ULA-coated**, was designed to help solve this. By combining scaffold-free spheroid formation with high-content imaging capability in a single plate, it eliminates 3D transfer from a culture plate to an imaging plate, while supporting preservation of the sample integrity throughout the screening process. Researchers can move from spheroid formation to 63x imaging without changing plates.



Maximum intensity z-projection (100 planes, distance 1 μm) imaged confocally with 40xhNA objective on Opera Phenix™ Plus high-content imaging system.

| PhenoPlate 3D 384-well microplate, ULA-coated.

Cellular imaging workflow



[PhenoPlate 3D 384-well microplates, ULA-coated](#)

Cell culture



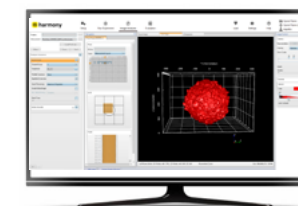
[PhenoVue™ reagents](#)

Staining



[Opera Phenix OptIQ™ high-content screening system](#)

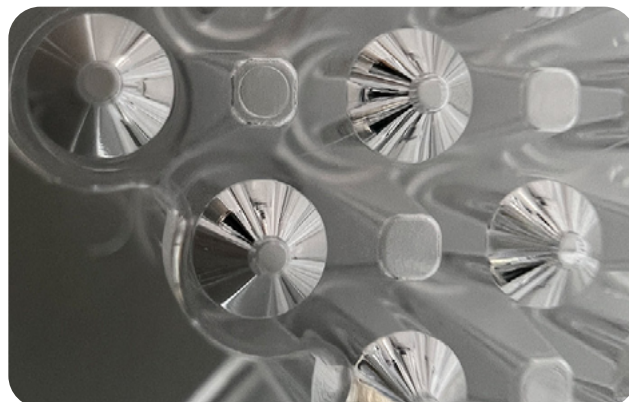
Imaging



[Harmony™ software](#)

Analysis

Key innovation

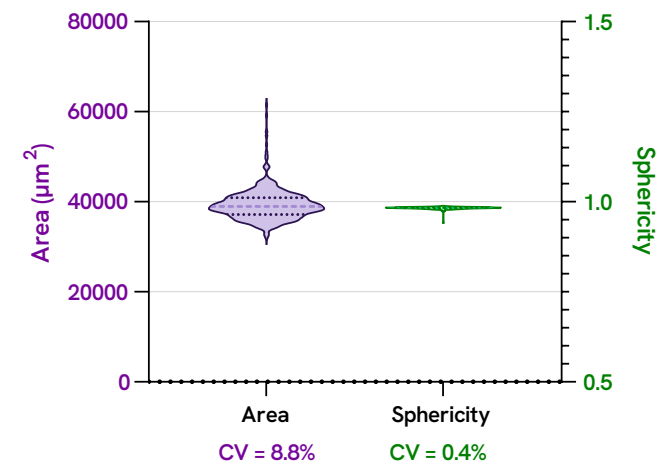


Funnel-shaped well design promotes uniform spheroid formation and growth. It allows medium exchange while reducing the risk of spheroid loss.

Purpose-built for precision, reliability, and efficiency, the PhenoPlate 3D 384-well microplate, ULA-coated, supports delivery of consistent, reproducible results across 384 wells. Whether working manually or at scale, it fits smoothly into existing workflows and helps accelerate the path from culture to discovery.

- **High-resolution imaging ready:** image at up to 63× water immersion for subcellular detail
- **Well-to-well consistency:** reliable, reproducible data across 384 wells
- **One plate, unified workflow:** form, stain, and image without changing plates
- **Automation-ready:** fits smoothly into your existing Revvity liquid handling setup
- **Robust spheroid formation:** consistent spheroid retention from seeding through staining
- **Engineered optical window:** a base as thin as 0.2 mm supports strong light transmission for sharper images

[Learn more](#)



Reproducible spheroids. Plate-wide consistency. Consistent area and sphericity across 384 wells support reliable downstream analysis and scalable workflows.

revvity